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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,911	03/21/2001	Edward B. Boden	END9 2000 0092 US1	4672

7590 01/14/2005  
IBM CORPORATION- DEPT. 917  
3605 HIGHWAY 52 NORTH  
ROCHESTER, MN 55901-7829

EXAMINER
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VU, THONG H

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 01/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/813,911

Applicant(s)

BODEN ET AL.

Examiner

Thong H Vu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 October 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-24 are pending.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-24 are rejected under the judicially created doctrine of double patenting over claims 1-14 of U. S. Patent No. 6,839,732 B1 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

(**732**) 8. A computer system for demultiplexing (decapsulating) a set of TCP/IP inbound connections to a set of outbound connections, the computer system comprising:

a plurality of scheduler process for providing TCP/IP inbound connections to agent processes for establishing corresponding outbound connections, the scheduler processes and the agent processes communicating by domain socket pairs in the computer system, each scheduler process having a dedicated domain socket pair for receiving a TCP/IP inbound connection endpoint, the domain socket pairs for communication to the agent processes being available from a pool of domain sockets; and

a wait queue implemented as a domain socket pair, the wait queue receiving a TCP/IP inbound connection endpoint where no agent process is available for implementing the TCP/IP inbound connection and from which non-empty wait queue an available agent process will remove a TCP/IP inbound connection endpoint to establish a TCP/IP inbound connection and an outbound connection.

(**Application**) 11. A method for nesting connections between a plurality nodes communication network, said nodes including a client, and internet service provider (ISP), an enterprise gateway, and an internal network, comprising the steps of:

operating said client node call said ISP node; operating said ISP node to start an outer connection with respect to said gateway node and to return an IP address to said client node;

operating said client node to send to said gateway node over said outer connection a request to establish a secure nested inner connection;

operating said client node and said gateway node to negotiate (i.e.: wait, remove) over said outer connection parameters defining said secure nested inner connection, saving said parameters at said gateway node; and thereafter operating said client node to start said inner connection; and operating said gateway node to recognize the start said inner connection and to link said inner connection said outer connection. (claim 8) responsive to said links, selectively encapsulating said traffic outer connection for transfer to said second node or decapsulating said traffic from said outer connection for receipt at said first node.

It is clearly that an operation to negotiate or define parameters included the encapsulate/decapsulate data to form a nest between the inbound and bound

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connection is equivalent to the implement process for a queue using a pool of domain sockets to establish a TCP/IP inbound connection and an outbound connection.

4. Claims 1-24 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-22 of copending Application No. 09/813,910. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows:

(‘910) 1. Method for operating a first node in a network including at least one second node, comprising the steps of:

establishing at said first node a coincident endpoint for an outer connection and an inner connection with respect to at least one second node;

responsive to receiving a nested packet from said second node on said outer connection, decapsulating said packet into a first packet and then performing source-in network address translation on said first packet; and

responsive to receiving a second packet at said inner connection, performing source-in network address translation on said second packet, and then encapsulating said second packet into a nested packet for communication on said outer connection to said second node.

(‘911) 1. System for nesting connections between a plurality of nodes in a communication network, comprising:

a first node on an outer connection for receiving a request from a second node to establish a coincident endpoint for nesting an inner connection within said outer connection;

said first and second nodes negotiating over said outer connection parameters defining said inner connection;

and thereafter said first node being responsive to communication occurring on said inner connection for linking to said outer connection for selectively receiving or sending said communication double nested on said outer connection.

It was clearly that decapsulating and encapsulating as a double nested connection between nodes.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-24 are rejected under 35 U.S.C. § 102(e) as being anticipated by Giniger et al [Giniger 6,751,729 B1].
6. As per claim 11, Giniger discloses a method for nesting connections between a plurality nodes communication network, said nodes including a client, and internet

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service provider (ISP), an enterprise gateway (i.e.: edge device), and an internal network [Giniger, an edge device connected LAN/WAN, Fig 1] comprising the steps of:

operating said client node call said ISP node [Giniger, computers connected to Internet via a telephone carrier, col 9 lines 30-55];

operating said ISP node to start an outer connection with respect to said gateway node and to return an IP address to said client node [Giniger, DHCP server, col 9 lines 5-25];

operating said client node to send to said gateway node over said outer connection a request to establish a secure nested inner connection [Giniger, an internal data path, a cryptographic ID, IPsec, col 10 lines 21-65];

operating said client node and said gateway node to negotiate over said outer connection parameters defining said secure nested inner connection, saving said parameters at said gateway node [Giniger, DHCP client obtains an external IP address, col 11 line 55-col 12 line 2]; and thereafter

operating said client node to start said inner connection [Giniger, scheduler coordinates execution of processes, col 12 lines 3-43] and

operating said gateway node to recognize the start said inner connection and to link said inner connection said outer connection [Giniger, two pairs public/private keys, col 12 line 44-col 14 line 62].

7. As per claim 8, Giniger discloses a method for operating a first one plurality of nodes in a communications network, comprising the steps of:

establishing at said first node a for an outer connection and an least one second node coincident endpoint inner connection with at said network [Giniger, an edge device connected LAN/WAN, Fig 1];

responsive to starting communication of traffic over said connections, establishing a link from said inner connection to said outer connection [Giniger, it initially starts up, col 8 line 29-col 9 line 20]; and

responsive to said links, selectively encapsulating said traffic outer connection for transfer to said second node or decapsulating said traffic from said outer connection for receipt at said first node [Giniger, two pairs public/private keys, col 12 line 44-col 14 line 62].

8. Claims 21,24 contain the similar limitations set forth of method claim 8. Therefore, claims 21,24 are rejected for the similar rationale set forth in claim 8.

9. As per claim 15, Giniger discloses a system for nesting connections between a plurality nodes a communication network, comprising:

first node on an outer connection for receiving request from a second node to establish a coincident endpoint for nesting an inner connection within said outer connection;

said first and second nodes negotiating over said outer connection parameters defining said inner connection; and thereafter



said first node being responsive to communication occurring said inner connection linking said outer connection for selectively receiving sending said communication double nested (i.e.: two encapsulations) on said outer connection [Giniger, two pairs public/private keys, col 12 line 44-col 14 line 62].

10. As per claims 2-3,9,16-17 Giniger discloses said inner connection being a secure connection (or an IPsec connection) [Giniger, IPsec, col 10 lines 21-65].

11. As per claims 4,7,10,14,18, Giniger-Rao disclose a Layer Tunnel Protocol (L2TP) connection for tunneling packets across said communication network [Giniger, L2TP, col 7 lines 32-52].

12. As per claim 6, Giniger discloses establishing a local coincident endpoint of said inner and outer connections at said gateway [Giniger, edge device, Fig 3].

13. As per claim 12, Giniger discloses sending outbound traffic in said inner connection **double** nested in said outer connection [Giniger, two pairs public/private keys, col 12 line 44-col 14 line 62].

14. As per claim 13, Giniger discloses operating said ISP node to decapsulate said outer connection; and operating said client node to decapsulate said inner connection as inherent features of two pairs of public/private keys.

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15. Claims 1,5,19,20,22,23 contain the similar limitations set forth of apparatus claim

15. Therefore, claims 1,5,19,20,22,23 are rejected for the similar rationale set forth in claim 15.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Thong Vu, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Jack Harvey*, can be reached at (571) 272-3896. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Thong Vu*  
*Patent Examiner*  
*Art Unit 2142*

